

---

---

---

हुक, कर्ण — विशिष्टि  
( पहला पुनरीक्षण )

Hooks, Aural — Specification  
( First Revision )

ICS 11.040.30

© BIS 2018



भारतीय मानक ब्यूरो  
BUREAU OF INDIAN STANDARDS  
मानक भवन, 9 बहादुरशाह ज़फर मार्ग, नई दिल्ली – 110002  
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG  
NEW DELHI-110002  
[www.bis.gov.in](http://www.bis.gov.in) [www.standardsbis.in](http://www.standardsbis.in)

## FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Ear, Nose and Throat Surgery Instruments Sectional Committee had been approved by the Medical Equipment and Hospital Planning Division Council.

This standard was originally published in 1966. The first revision of this standard has been taken up to update it with the development taken place in the field. All the amendments issued so far have been incorporated in this revision.

This Indian Standard is one of a series on surgical instruments. This standard has been prepared based on indigenous manufacturer's data/practices prevalent in the field in India.

For the purpose of deciding whether a particular requirement of this standard is complied with the final value, observed or calculated, expressing the result of a test or analysis shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be same as that of the specified value in this standard.

*Indian Standard*

# HOOKS, AURAL — SPECIFICATION

*(First Revision)*

## 1 SCOPE

This standard covers the requirements of aural hooks of the following patterns used in ENT work:

- a) Watson William's pattern with Cerumen spud and hook, and
- b) Gardiner Brown's pattern with hook and Imray's loop.

## 2 REFERENCES

The standards listed below contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of these standards.

IS No.	Title
1501 (Part 1) : 2013	Metallic materials — Vickers hardness test: Part 1 Test method ( <i>fourth revision</i> )
1570 (Part 5) : 1985	Schedules for wrought steels: Part 5 Stainless and heat-resisting steels ( <i>second revision</i> )

IS No.	Title
3642 (Part 1) : 1990	Surgical instruments — Specification: Part 1 Non-cutting, articulated instruments ( <i>second revision</i> )
7531 : 1990	Surgical instruments — Corrosion resistance of stainless steel surgical instruments — Methods of tests ( <i>first revision</i> )

## 3 MATERIAL

The hooks shall be made from stainless steel conforming to designation 30Cr13 of IS 1570 (Part 5).

## 4 SHAPES AND DIMENSIONS

**4.1** The shapes and dimensions shall conform to Fig. 1 and 2.

**4.2** Tolerances on dimensions, where not specified, shall conform to IS 3642 (Part 1).

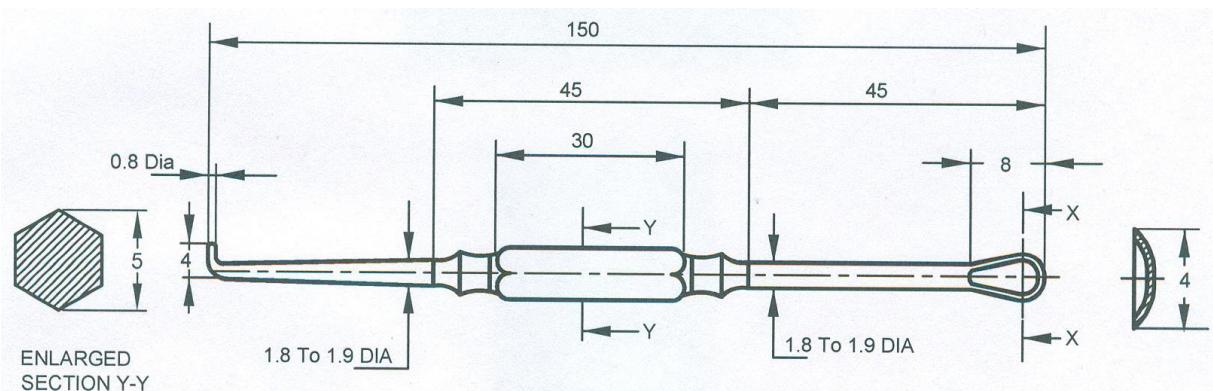
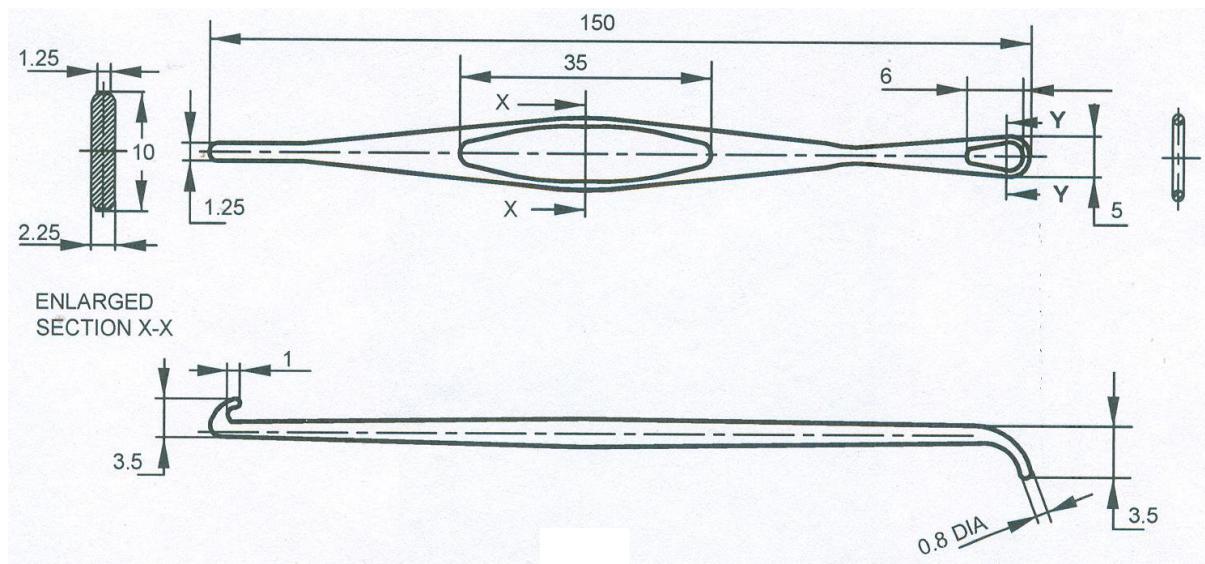


FIG. 1 HOOK, AURAL, WATSON WILLIAM'S PATTERN WITH CERUMEN SPUD AND HOOK



All dimensions in millimetres.

FIG. 2 HOOK, AURAL, GARDINER BROWN'S PATTERNS WITH HOOK AND IMRAY'S LOOP

## 5 MANUFACTURE, WORKMANSHIP AND FINISH

**5.1** Each hook shall be forged in one piece to the shape and size. The instrument shall be well balanced and symmetrical on its centre line. The hooks shall be passivated and finely polished and shall be free from pits, burrs, blemishes and other surface defects.

**5.2** In the Watson William's pattern the hook bend shall have a uniform curvature without any sharp edges. The spud end shall not have any sharp edges and shall be capable of taking a minimum of 5 g of wax. In the Gardiner Brown's pattern, the hook end shall be accurately shaped without any sharp edges. The loop shall be elliptical and free from sharp edges.

## 6 HEAT TREATMENT

The hook shall be hardened and tempered to a Vickers hardness of 430 to 490 HV of the finished instrument when tested at the tips in accordance with IS 1501 (Part 1).

## 7 TESTS

### 7.1 Flexibility Test

The middle portion of the hook shall be gripped in the vice so that each end projects about 40 mm from the vice in the horizontal plane. By the application of a force to the end, the shaft shall be deflected by 5 mm as measured at the end in the horizontal plane. It shall next

be deflected similarly at the other end through same distance. On completion of the test on both the sides, the hook shall show no sign of damage or permanent set.

### 7.2 Corrosion Resistance

The instrument shall satisfy the boiling and autoclaving test as specified in IS 7531.

## 8 MARKING

**8.1** Each hook shall be clearly and legibly marked with the manufacturer's name, initials or trade-mark and the country of manufacture.

### 8.2 BIS Certification Marking

The hook may also be marked with Standard Mark.

**8.2.1** The use of the Standard Mark is governed by the provisions of *Bureau of Indian Standards Act, 2016* and the rules and regulations made thereunder. The details of the conditions under which the licence for use of the Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

## 9 PACKING

The hook shall be wrapped in wax paper and six such pieces shall be packed in polyethylene bag or cardboard box.



## **Bureau of Indian Standards**

BIS is a statutory institution established under the *Bureau of Indian Standards Act*, 2016 to promote harmonious development of the activities of standardization, marking and quality certification of goods and attending to connected matters in the country.

### **Copyright**

BIS has the copyright of all its publications. No part of these publications may be reproduced in any form without the prior permission in writing of BIS. This does not preclude the free use, in the course of implementing the standard, of necessary details, such as symbols and sizes, type or grade designations. Enquiries relating to copyright be addressed to the Director (Publications), BIS.

### **Review of Indian Standards**

Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the latest issue of 'BIS Catalogue' and 'Standards: Monthly Additions'.

This Indian Standard has been developed from Doc No.: MHD 04 (0399)

### **Amendments Issued Since Publication**

<b>Amend No.</b>	<b>Date of Issue</b>	<b>Text Affected</b>

## **BUREAU OF INDIAN STANDARDS**

### **Headquarters:**

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002  
Telephones: 2323 0131, 2323 3375, 2323 9402

Website: [www.bis.gov.in](http://www.bis.gov.in)

### **Regional Offices:**

		<i>Telephones</i>
Central	: Manak Bhavan, 9 Bahadur Shah Zafar Marg NEW DELHI 110002	{ 2323 7617 2323 3841
Eastern	: 1/14 C.I.T. Scheme VII M, V.I.P. Road, Kankurgachi KOLKATA 700054	{ 2337 8499, 2337 8561 2337 8626, 2337 9120
Northern	: Plot No. 4-A, Sector 27-B, Madhya Marg CHANDIGARH 160019	{ 265 0206 265 0290
Southern	: C.I.T. Campus, IV Cross Road, CHENNAI 600113	{ 2254 1216, 2254 1442 2254 2519, 2254 2315
Western	: Manakalaya, E9 MIDC, Marol, Andheri (East) MUMBAI 400093	{ 2832 9295, 2832 7858 2832 7891, 2832 7892
<b>Branches</b>	AHMEDABAD. BENGALURU. BHOPAL. BHUBANESHWAR. COIMBATORE. DEHRADUN. DURGAPUR. FARIDABAD. GHAZIABAD. GUWAHATI. HYDERABAD. JAIPUR. JAMMU. JAMSHEDPUR. KOCHI. LUCKNOW. NAGPUR. PARWANOO. PATNA. PUNE. RAIPUR. RAJKOT. VISAKHAPATNAM.	